

# Survey of the Sales of Contraceptives by Pharmacies of Dacca, East Pakistan

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COMMERCIAL CHANNELS are important in the distribution of contraceptives throughout much of the world (1). In fact, commercial distributors have been included in several national family planning programs now underway. In India marketing plans have been proposed requiring 400,000 agents to sell traditional contraceptives (2). In Taiwan surveys of manufacturers, importers, local drugstore owners, and herbalists showed drugstores to be the major distributors of contraceptives, supplying more contraceptives to the public than the government or voluntary organizations combined (3). In Pakistan studies conducted by the Pakistan Academy for Rural Development, Comilla, have included models for contraceptive programs in rural areas (4). The "Family Planning Scheme for Pakistan During the Third Five-Year Plan Period" provides for the widespread appointment of agents to sell government-subsidized contraceptives in both rural and urban areas (5).

To gain more information about use of commercial channels in Dacca we began a study of the role of pharmacies in distributing contra-

ceptives. Factors investigated included availability, price, and popularity of different contraceptives; numbers, characteristics, and behavior of customers; and extent to which changes in commercial activity have taken place. This report on our findings may provide another measure of response to government publicity programs and an indication of ongoing social change, as well as knowledge about the activities of urban populations that are instrumental in instituting new values and norms in the society (6). The report may also provide information useful in planning programs to increase demand for contraceptives and in instituting improvements in both government and commercial distribution.

## Methods

A preliminary survey located 16 areas of the city in which pharmacies are clustered. An interview schedule was developed, in Bengali, which included precoded responses in situations for which categorization was possible in addition to questions in areas in which numerical estimates and qualitative information were sought. The instrument was pretested and necessary revisions were made. Standardized interviews were then conducted in June and July 1966 by two matriculate level (10 years of education) men with previous interviewing experience. They were trained for 4 days in the use of the interview schedule, including supervised interviewing in the field. Interviewers were in-

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structed to interview one worker in as many pharmacies as possible in the 16 areas.

This report relies, to a large extent, on estimates they obtained from 114 shopkeepers. The estimates are not intended to indicate exact frequencies or percentages, but are used to establish ranks, trends, and approximate proportions.

Attempts to validate responses were made only in the two largest pharmacies of the city. However, these two pharmacies had 40 percent of the total number of customers for contraceptives in the 114 pharmacies. Study directors interviewed the managers of these shops, probing until there was consistency between four indices of sales—the estimates of total number of customers for contraceptives, the percentage and number of customers purchasing each type, the amount generally purchased by individual customers, and the volume of supplies ordered from wholesale distributors.

In order to simplify the interview and thereby increase the cooperation of the respondents, shopkeepers were asked to estimate percentages rather than numbers of customers by sex, socioeconomic class, and type of contraceptive purchased. Estimated percentages from each shop were multiplied by the number of customers reported by each shop and added to arrive at estimated totals.

## Results

*Availability.* Of the 114 pharmacies surveyed, 96 sold at least one type of contraceptive. The oral pill, sold in 94, was the most widely available method. Condoms, including lubricated and nonlubricated types, were available in 53 pharmacies. Jelly was available in 39 pharmacies, and foam tablets were available in 26 pharmacies. Diaphragms were found in only one pharmacy (in East Pakistan they are frequently supplied directly by a physician). Informal visits to other types of shops confirmed that condoms were available in many stationery or variety stores and that a few indigenous medicine shops (hakeems) were selling preparations claimed to have contraceptive properties—including cream applications, oral tablets, and suppositories.

Few shops had signs outside indicating that contraceptives were on sale. However, most

shops had contraceptives on display in a glass case where they could be easily identified by a customer.

An estimated 6,000 persons bought contraceptives during the month prior to the interviews. The number of customers reported per shop ranged from 1 to 1,850; the median and modal number of customers were both 10. However, about 80 percent of the customers were reported from only 14 of the 96 shops that reported 100 or more customers for contraceptives during this month. The pharmacies with the largest number of customers for contraceptives appear to have had the largest number of customers for all pharmaceuticals on sale, were located in the busiest commercial areas, and usually were well known throughout the city.

*Popularity of different methods.* Sales of oral pills and condoms (lubricated and nonlubricated) were about equal and together accounted for more than 90 percent of all contraceptives bought. Most of the rest of the sales were for jelly. Foam tablets accounted for only 1 percent of the contraceptives sold in the pharmacies surveyed.

The shopkeepers reported that most customers purchased only three condoms at a time. Present commercial packaging and pricing procedures support this practice. Thus, many of the customers for condoms may have been accounted for more than once during the month.

It should be remembered in estimating contraceptive protection as reflected by the number of customers for each type of contraceptive that while oral pills provide 1 month of protection, three condoms usually provide less than this, and one tube of jelly provides more.

*Customers.* Shopkeepers reported that about 95 percent of the customers for contraceptives were men. Men purchased both male- and female-oriented methods in the pharmacies. Women are widely reported to purchase condoms in the villages from the female village organizer. The fact that all of the pharmacy shopkeepers surveyed were men may account for women's unwillingness to purchase condoms in the city and may also be related to the small number of women customers reported in the Dacca pharmacies. However, because of restrictions on the mobility of Muslim women, the percentage of women purchasing contraceptives may be no

different from the percentage of women purchasing any household or medical item.

Shopkeepers estimated that only 3 percent of their customers for contraceptives were in the lower socioeconomic group, defined in the interview as "manual laborers, other low-level workers or tiny stall owners, hawkers, street vendors, orderlies, or other workers of this rank." The middle class, "people with more education and income, considered gentlemen, such as clerks, petty businessmen or petty government officials," made up 41 percent of the customers, and the upper class, "rich people such as big businessmen or high government officials," 56 percent. Although little data are available on the Dacca population, it is our impression that the lower socioeconomic group is underrepresented and the upper socioeconomic group overrepresented among contraceptive buyers.

*Change in sales.* Shopkeepers estimated a monthly total of 2,500 customers for contraceptives in 1965, a year prior to the interviews. The estimate of more than 6,000 customers monthly reported by shopkeepers for 1 year later is an increase of nearly 150 percent.

This reported increase in the number of customers may be related to the great amount of publicity regarding family planning in Dacca since the recent implementation of the family planning scheme for the third 5-year plan. Also, the growing worldwide popularity of oral pills may account for some of the total increase in contraceptive sales since oral pills made up a sizable proportion of contraceptives sold in Dacca.

Customers were widely reported to act less shy, embarrassed, and secretive when purchasing contraceptives now than in the past. This may be an indication that social norms relating to the practice of contraception are changing in Dacca. This type of change, which is probably also related to the publicity of the family planning scheme, should prove beneficial to the adoption of family planning throughout the society.

*Pharmacies as government agents.* Only five of the 96 shops that had any contraceptive available had condoms at the government-subsidized rate of 10 paisa per dozen (approximately 2 cents). There were an estimated 600 customers in these shops during the month prior to inter-

view; an estimated 450 of them purchased condoms at the government rate. These shops estimated a monthly total of only 160 customers for 1 year prior to interview. The rise to 600 customers a month in 1966 represents an increase in sales of more than 270 percent.

However, these shops reported no customers in the lower socioeconomic group; most were in the middle group. It appears that condoms were in greater demand where they are sold at the rate of 10 paisa per dozen, but few pharmacies sold at that rate, and those that did were still not reaching the lower socioeconomic group.

Seven shops reported having foam tablets at the government-subsidized rate of 10 paisa. However, there was nearly no demand for these even at the very low price, and the demand did not appear to increase as price decreased.

A few shops reported having either condoms or foam tablets below normal commercial rates and above government-subsidized rates. It is likely that some shops increased the price of government-subsidized contraceptives for personal profit.

*Other findings.* To the majority of pharmacy shopkeepers "family planning" refers to the government program; a frequent response to interviewers' queries about family planning supplies was, "We don't have family planning supplies, only commercial contraceptives."

Pharmacy shopkeepers reported a total of about 400 inquiries per month relating to the intrauterine device. Nearly all shopkeepers who reported inquiries about the device also reported that they told the customer a source for obtaining it.

About half of the shopkeepers reported recommending a particular contraceptive method, either outright or only at the customer's request. Oral pills were recommended by nearly all shopkeepers who made recommendations. Their reported reasons for recommending oral pills are 100 percent safety, less "botheration" in use, and greater profit. The commercial rate of oral pills was found to be generally PRs 4.95 to PRs 5.35 per cycle, depending on the brand (1 rupee=21 cents). In comparison a wide variety of condoms were available between PRs 1.50 and PRs 4.00 per dozen, with the price in a few shops as high as PRs 8.00 for the most expensive lubricated types.

## Recommendations

Study findings indicate a widespread lack of availability of inexpensive condoms in pharmacies and great demand where they are available. Therefore, the number of outlets for condoms at the government-subsidized rate of 10 paisa per dozen should be increased in the urban areas. Persons in the lowest socioeconomic group, who would most benefit from reduced contraceptive rates, did not frequent urban pharmacies for contraceptives and perhaps not for any reason. Other researchers have reported that there may be a stigma attached to frequenting family planning clinics for contraceptive supplies (7). Consideration should therefore be given to the use of a large number of commercial outlets that have a wider range of customers, such as cigarette or tea stalls in urban areas.

As public awareness of the availability of contraceptives would seem to be a precondition for their use, specific publicity and signs indicating where the inexpensive contraceptives are available should be considered. Shopkeepers reported that many customers thought that price was a definite indicator of the quality of condoms; therefore, publicity regarding the high quality and reason for the low price of government-subsidized condoms may result in increased demand.

The oral pill was found to be increasingly popular. As information regarding this method of contraception can be expected to spread from urban areas, exploration into the feasibility of oral contraceptives for other segments of the society should continue.

Because continued support for the changing norms relating to contraceptive practice can be expected to hasten its widespread adoption, the growing acceptance of family planning reflected in research findings (such as the large increase in contraceptive sales and change of customer behavior) should be communicated to the public.

## Summary

A survey of 114 pharmacies was conducted in Dacca, East Pakistan, in order to investigate features of the commercial system for distribut-

ing contraceptives. Tentative findings, which must be verified by other research methods, indicate that oral pills and condoms were the most widely available contraceptive methods, and together accounted for more than 90 percent of all sales.

Of the estimated monthly total of more than 6,000 customers, about 95 percent were men in the middle and upper socioeconomic groups. Shopkeepers estimated that sales have increased by nearly 150 percent between 1965 and 1966, and reported customers behaved in a less shy, embarrassed, secretive manner than in the past.

Few shops reported selling government-subsidized condoms at the suggested price of 10 paisa. Those shops that do sell condoms at that price reported a large number of customers and an estimated sales increase of more than 270 percent between 1965 and 1966. Foam tablets were not popular and accounted for only 1 percent of all sales. The demand for foam tablets did not appear to increase as price decreased.

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